

REMARKS

This is in response to the Final Office Action mailed April 17, 2009. Further, this is accompanied by a Request for Continued Examination (RCE). In the Office Action, claims 1, 5, 6, 8, 10, 11, 13, and 14 were pending and were rejected. With this Amendment, claims 1, 8, and 13-14 are amended and new claims 16-25 have been added. In view of the following, reconsideration and allowance are respectfully requested.

Claim Rejections – 35 U.S.C. §112, second paragraph

On page 2, claim 1 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. With this Amendment, Applicant has amended claim 1 to recite “the recognized predefined prefix, instead of “the detected predefined prefix.” Applicant submits that there is sufficient antecedent basis for the amended claim language and respectfully requests that the rejection of claim 1 under 35 U.S.C. §112, second paragraph, be withdrawn.

Claim Rejections - 35 U.S.C. §102

On page 2, claims 1, 5, 6, 8, 10, 11, 13 and 14 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Gong et al. (US Patent Publication No. 2007/0179778, hereinafter “Gong”).

Applicant would first like to discuss new independent claim 20. Claim 20 provides a system and includes an input for receiving speech, a plurality of target software applications, and a processor for recognizing received speech using a set of grammars. The system also includes a plurality of grammar categories. Each of the plurality of grammar categories is represented by a data structure that indicates a predefined prefix associated with the grammar category, a single grammar of the set of grammars associated grammar category, an identification of a parent of the grammar category, and a particular target software application of the plurality of target software applications associated with the grammar category. The processor receives a portion of input speech and accesses the data structures that represent the plurality of grammar categories to identify a prefix in the portion of input speech and to generate an output by recognizing the portion of the input speech. The portion of input speech is recognized using a single grammar

selected from the set of grammars based on the identified prefix. The output is provided to the particular target software application that is identified in the plurality of grammar categories as being associated with the identified prefix. Applicant notes that support for new independent claim 20 can be found in Applicants specification, in one instance, at page 12, line 29-page 15, line 23.

In contrast to independent claim 20, the cited Gong reference relates to a dynamic grammar for voice-enabled applications. While Gong may appear to provide dynamic grammar selection based upon a first input, the closest Gong appears to get to directing recognized text to a target application appears to be provided in paragraph [0271]. Specifically, that paragraph provides that the user “may alternatively use fields individually, simply by providing the activation signal for a selected one of the currently activated grammars. For example, the activation signal may involve saying the name of the desired field associated with the grammar to be activated.” This discussion of fields is in the context of paragraph [0272] which provides a number of fields on page 2600. Accordingly, there does not appear to be an association between a single grammar selected based on an identified prefix and a target software application.

Moreover, Gong also does not teach or suggest a plurality of grammar categories that are each represented by a data structure as claimed. In particular, Gong does not teach or suggest providing a data structure that indicates a predefined prefix associated with a grammar category, a single grammar of a set of grammars associated with the grammar category, an identification of a parent of the grammar category, and a particular target software application associated with the grammar category as claimed. In contrast, in Gong it is mentioned that a graphical user interface “may include a form with a plurality of fields, each field associated with a predetermined category. Each category may have its own, independent discrete grammar associated therewith” (see Abstract). As disclosed in paragraphs [0004]-[0011], the categories simply relate to a particular field of a form and appear to only represent a particular type of field. Thus, the “categories” disclosed in Gong are not represented by data structures that indicate each of a predefined prefix, a single grammar, an identification of a parent, and a particular software application associated with a grammar category as recited in claim 20.

For at least these reasons, Applicant respectfully submits that independent claim 20 is neither taught nor suggested by the cited reference and is in allowable form.

Amended independent claim 13 provides a speech recognition system including an input for receiving speech and a processor for recognizing speech using a set of one or more grammars. The processor is adapted to receive a first speech input and recognize a prefix associated with a desired category in the first speech input. The processor is adapted to recognize the first speech input using a first grammar associated with the desired category when the prefix is recognized to generate output. The output is provided to a target software application associated with the grammar associated with the prefix. As recited in amended claim 13, for a subsequent speech input the processor recognizes the subsequent speech input using the first grammar associated with the desired category if a subsequent prefix is not identified in the subsequent speech input. The processor recognizes the subsequent speech input using a second grammar that is different than the first grammar if a subsequent prefix that indicates another category is recognized in the subsequent speech input. Applicant notes that support for this amendment to claim 13 can be found in the specification at least at page 12, line 29 – page 14, line 23 and page 17, line 11 – page 18, line 27.

As similarly discussed above, Gong does not teach or suggest directing or providing an output of recognized speech to a target application associated with a grammar and/or prefix. Moreover, Gong also does not teach or suggest recognizing a subsequent speech input using the same grammar that was used to recognize a first speech input if a subsequent prefix is not identified in the subsequent input and recognizing the subsequent speech input using a second grammar that is different than the first grammar (that is used to recognize the first speech input) if a subsequent prefix that indicates another category is recognized in the subsequent speech input.

For at least these reasons, Applicant respectfully submits that independent claim 13 is neither taught nor suggested by the cited reference and is in allowable form.

With regard to independent claim 1, Applicant respectfully submits that Gong at least does not teach or suggest directing recognized text to a target software application associated with a single grammar where a predefined prefix is recognized in user speech and is associated

with the single grammar. Independent claim 1 has also been amended to recite “Identifying the target software application that is associated with the single grammar, the target software application being selected from a plurality of target software applications, associated with other grammars, based on the predefined prefix.” Applicant notes that support for this amendment can be found in the specification at least at page 12, line 9 – page 15, line 23.

In the Response to Arguments section of the Final Office Action, the Examiner alleges that “The claims were amended to include a limitation where the target category for the recognized word is a software application.” The Examiner goes on to contend that “this addition of the intended use of the method doesn’t patentably overcome the Gong patent.” Applicant respectfully submits that it is unclear as to what claim language or sections of Gong the Office Action is referring to. For instance, Applicant does not see where in claim 1 the Examiner is construing the amended claim language to recite an “intended use” related to a “target category for the recognized word” as stated in the Office Action. Applicant does note that the claim specifically recites “recognizing text” and “directing recognized text to the target software application associated with the single grammar” (emphasis added). Applicant believes that this claim language not disclosed by the Gong reference. For instance, as disclosed in paragraph [0004] of the Summary of Gong, Gong discusses a grammar in the context of an application implementing a graphical user interface. Gong states that a grammar is associated with a field in the form. For that field, the grammar is used to recognize an input. The grammar does not direct recognized text to a software application where the target software application is identified as being associated with the single grammar and the target software application is selected from a plurality of target software applications, associated with other grammars, based on the predefined prefix. This failure of the disclosure of Gong to teach or suggest directing recognized text can also be seen in the portions of Gong cited in the Response to Arguments section (i.e., paragraphs [0166]-[0168]). In paragraphs [0166]-[0168], Gong discusses a user interface as it relates to an application residing on a computing device. Gong discusses that there are different types of applications and devices that can use the disclosed system. In particular, different applications can have user interfaces with fields. Applicant strongly emphasizes that nowhere is it taught or

suggested that recognized text is directed to an application where grammars are associated with the applications based on prefixes and/or grammars.

For at least these reasons, Applicant respectfully submits that independent claim 1 is neither taught nor suggested by the cited reference and is in allowable form.

Further, Applicant submits that related dependent claims 5, 6, 8, 10-11, 14, 16-19 and 21-25 are also in allowable form at least based on the relation to independent claims 1, 13, and 20, discussed above. Applicant notes that support for new dependent claims 16-19 and 21-25 can be found in the specification at least at page 12, line 29 – page 14, line 23 and page 17, line 11 – page 18, line 27.

Additionally, Applicant submits that at least some of these dependent claims recite features that are also neither taught nor suggested by the cited reference. For example, dependent claim 21 recites “wherein, for each of the plurality of grammar categories, the data structure representing the grammar category includes a flag that indicates whether the prefix associated with the grammar category is required to invoke the grammar category.” Gong does not teach or suggest a data structure including a flag or that a flag can be used to indicate whether a prefix is required to invoke a grammar category.

Further, dependent claim 22 recites “wherein the at least one grammar category associated with the identified prefix is defined as an `ActiveCategory`, and wherein the processor receives a subsequent portion of input speech that does not include an identified prefix and automatically recognizes the subsequent portion of input speech using the at least one grammar associated with the `ActiveCategory`.” Applicant submits that support for this claim can be found in the specification at least at page 12, line 29 – page 15, line 23. In contrast, the cited Gong reference discusses the use of a dynamic grammar and concepts related to associating fields with input categories. Gong does not teach or suggest that a subsequent input can be recognized using a grammar associated with an `ActiveCategory` if a prefix is not identified in the subsequent input.

Further, dependent claim 23 recites “wherein the plurality of grammar categories are arranged in a hierarchy including at least one parent category having at least one descendent category.” Gong simply does not teach or suggest a category hierarchy as claimed.

Further, dependent claim 24 recites “wherein the processor is configured to access all grammars associated with the ActiveCategory and any descendent categories that descend from the ActiveCategory for a subsequent speech input that does not include an identified prefix.” Again, Gong does not teach or suggest an ActiveCategory for accessing grammars based on an ActiveCategory as claimed.

Further, dependent claim 25 recites “wherein for subsequent portions of input speech a prefix is only required to invoke any grammar categories that are not included in the ActiveCategory and are not descendent categories that descend from the ActiveCategory.” Again, Gong does not teach or suggest an ActiveCategory or descendant categories that descend from a parent category. Moreover, Gong also does not teach or suggest that a prefix is required to invoke grammar categories that are not included in an ActiveCategory and are not descendent categories thereof.

It is noted that these are examples of dependent claims that are believed to be independently patentable.

In conclusion, Applicants submit that the entire application is in condition for allowance. Reconsideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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